

**Notice of Allowability**

Application No.

10/766,028

Applicant(s)

UNSWORTH ET AL.

Examiner

Art Unit

Ruth C. Rodriguez

3677

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 8 June 2006.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☒ to Paper No./Mail Date 03012006.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

***Reasons for allowance***

The following is an examiner's statement of reasons for allowance:

For claim 1, Morton discloses an expandable fastener assembly comprising a threaded fastener, a continuous expandable helical coil member and releasably securing means. The threaded fastener has a head and a shank extending. The head has a helical threads extending radially outwardly from the shank. The helical coil member winds around the shank and is located between the threads. A thread-contacting surface generally faces one of the ends of the fastener. However, Morton fails to disclose that shank has a pair of interleaved helical threads extending radially outwardly from the shank and that assembly comprises releasable securing means releasably securing the coil member in its radially compressed form to the shank of the fastener the coil member. Therefore, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to have a pair of interleaved helical threads extending outwardly from the shank and to have a releasable securing means releasably securing the coil member in its radially compressed form to the shank of the fastener the coil member where the securing means maintains the coil member in its radially compressed form at least until the coil member is substantially completely threaded into the substrate.

Regarding claim 24, the same reasons for allowance of claim 1 apply to claim 24. Claim 24 recites additional details on how the coil member is released by having a pivot

axis on the thread engaging portion of the coil member where the coil member is unlatched by twisting about the pivot axis after contacting the substrate and by combining with complementary shapes of the thread-contacting surface of the coil member. By unlatching, the coil member moves towards the distal end of the fastener to bias the fastener into the substrate. Therefore, it would not have been obvious to one having ordinary skill in the art at the time of applicant's invention to bias the coil member against the substrate by twisting the coil member about the pivot axis and in combination with complementary shapes of the thread-contacting surface of the coil member.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bereza (US 2,520,232), Textrom (US 3,515,027), King, Jr.(US 3,983,736), Breed (US 4,040,326), Reece et al. (US 4,712,955), Morton (US 5,312,214), Krenzer et al. (US

5,820,316), Tseng (US 5,961,266 and US 6,461,092 B2) and Unsworth et al. (US 6,276,883 B1, US 6,494,657 B2 and US 6,860,691 B2) are cited to show state of the art with respect to fasteners having a threaded member in combination with a coil spring that is disposed between the threads of the threaded member that and having some or most of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

rcr  
September 4, 2006

  
**ROBERT J. SANDY**  
**PRIMARY EXAMINER**

DO NOT  
ENTER  
PAT  
9/1/06

Fig. 12a

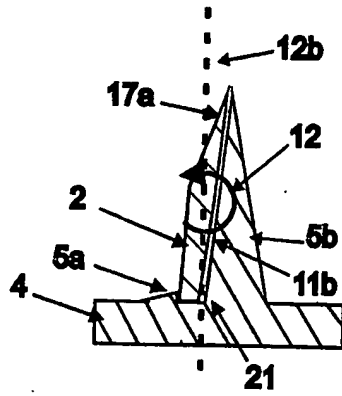


Fig. 12b

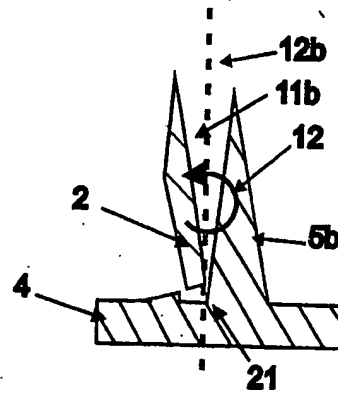


Fig. 12c

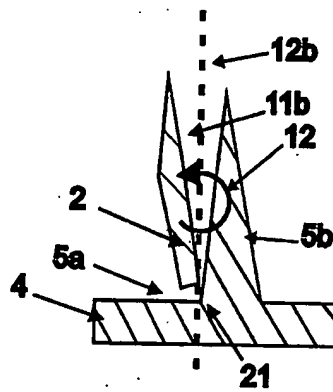


Fig. 13

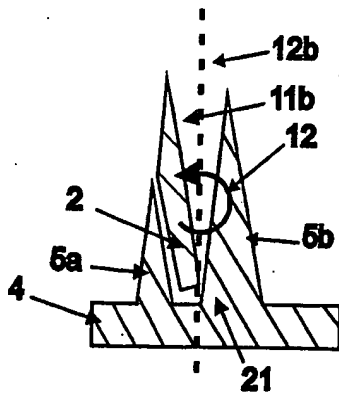
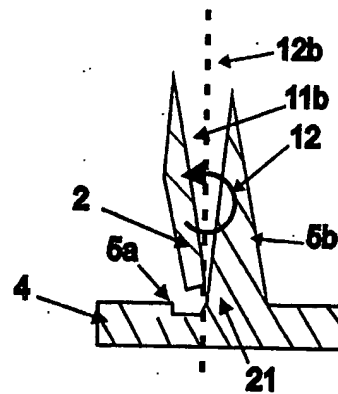


Fig. 14



APPROVED  
ZLR  
8/1/06

REPLACEMENT SHEET  
For: Application No. 10/766,028  
Title: Self Adjusting, High Strength, Screw System  
Applicant: Unsworth et al.

Fig. 1

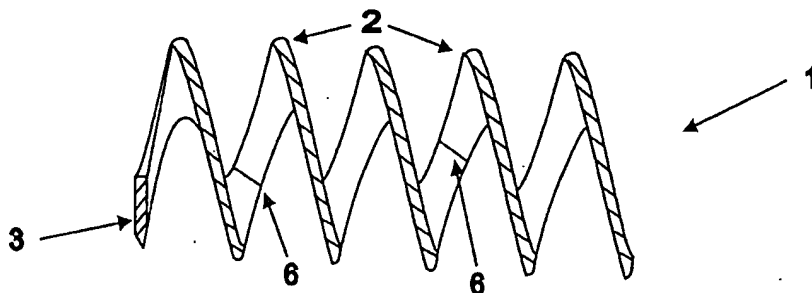


Fig. 2a

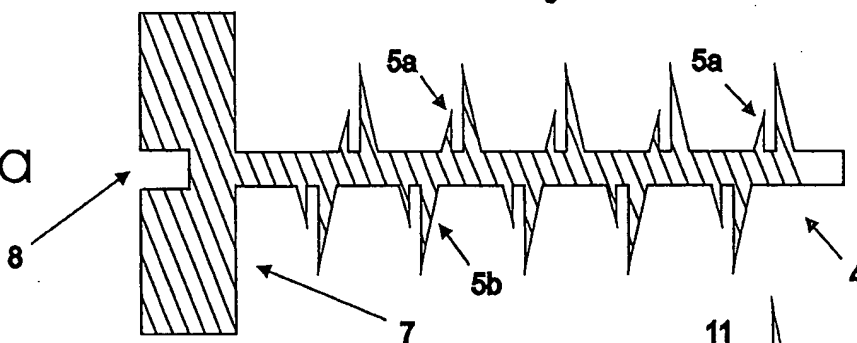


Fig. 2b

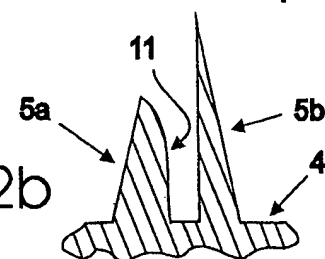


Fig. 3

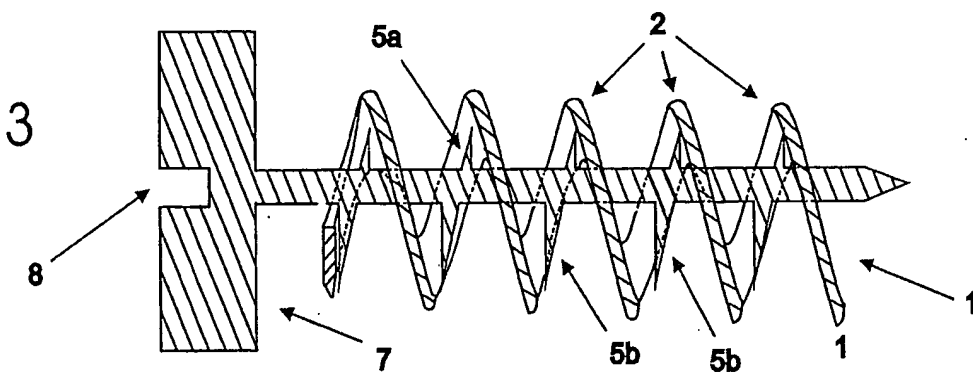


Fig. 4

